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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,007	03/26/2004	David L. Robinson	0739D-000105	2659
27572	7590	12/01/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			EDELL, JOSEPH F	
			ART UNIT	PAPER NUMBER
			3636	

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/812,007

Applicant(s)

ROBINSON ET AL.

Examiner

Joseph F. Edell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-25 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 10, 11, 13, 15-17, 19, and 21-25 is/are rejected.  
7) ☒ Claim(s) 12, 14, 18 and 20 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE Patent No. 25 08 645 to Vollrath in view of U.S. Patent No. 6,024,410 to Yoshida.

Vollrath discloses a seat assembly that is basically the same as that recited in claims 16 and 21 except that the assembly lacks a recliner mechanism, as recited in the claims. See Figures 1 and 2 of Vollrath for the teaching that the seat assembly has a seatback 1 (see Fig. 1), a headrest assembly 12 supported by the seatback and including a first housing (upper portion of seatback frame 1) fixedly attached to the seatback and including a cross-member 2 fixedly attached thereto, a second housing (interior of headrest - see Fig. 2) rotatably supported by the first housing, and a lock mechanism 5,7 including a coil spring 7 operable to engage the cross-member to restrict rotation of the second housing and disengage the cross-member to permit rotation of the second housing, such that the lock member is spaced apart from the cross-member, the coil spring at least partially surrounds an outer diameter of the cross-member, the first housing includes a pair of flanges (upper ends of seatback frame 1)

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extending therefrom and fixedly attached to first and second ends of the cross-member, a lever 13 rotatably attached to the cross member via support bar 10 and arms 8,8 and operable to selectively unlock the lock mechanism and permit rotation of the second housing relative to the first housing, and at least one end 6 of the coil spring acts as a biasing member in response to the other end 6 being rotated by the lever 13 to urge the lock member into the locked position. Yoshida shows a seat assembly similar to that of Vollrath wherein the seat assembly has a seat bottom 52 (see Fig. 4), a seatback 51 pivotally supported by the seat bottom, a recliner mechanism (Fig. 1) operable between a locked position restricting rotation of the seatback relative to the seat bottom and an unlocked position permitting rotation of the seatback relative to the seat bottom. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the seat assembly of Vollrath such that the seatback is pivotally supported by a seat bottom, and a recliner mechanism operable between a locked position restricting rotation of the seatback relative to the seat bottom and an unlocked position permitting rotation of the seatback relative to the seat bottom, such as the seat assembly disclosed by Yoshida. One would have been motivated to make such a modification in view of the suggestion in Yoshida that the recliner mechanism provides a seatback that is adjustable to desired angular positions.

3. Claims 10, 15, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vollrath in view of U.S. Patent No. 5,826,942 to Sutton et al.

Vollrath discloses a seat assembly that is basically the same as that recited in claims 10, 15, and 23-25 except that the assembly lacks a recliner mechanism coupled

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to the lock mechanism, as recited in the claims. Sutton et al. show a seat assembly similar to that of Vollrath wherein the assembly has a seat bottom 14 (see Fig. 1) with a seat frame 26, a seatback 20 pivotally supported by the seat frame of the seat bottom, a recliner mechanism 32 operable between a locked position restricting rotation of the seatback relative to the seat bottom and an unlocked position permitting rotation of the seatback relative to the seat bottom, and a headrest assembly (see Fig. 3) with a lock mechanism coupled to the recliner mechanism. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the seat assembly of Vollrath such that the seatback is pivotally supported by a seat bottom, and the seat assembly includes a recliner mechanism operable between a locked position restricting rotation of the seatback relative to the seat bottom and an unlocked position permitting rotation of the seatback relative to the seat bottom, and the lock mechanism is coupled to the recliner mechanism, such as the seat assembly disclosed by Sutton et al. One would have been motivated to make such a modification in view of the suggestion in Sutton et al. that the coupling of the recliner mechanism to the lock mechanism of the headrest allows the headrest to be safely and automatically stored when the seat assembly is moved to a storage position.

Although the rotation angle range of the Vollrath's headrest is not specifically recited, modifying the rotation angle range between a fully upright position to a fully dumped position would have been obvious at the time of Applicant's invention because the use of optimum or workable ranges discovered by routine experimentation is ordinarily within the skill of the art. Further, it would have been an obvious matter of

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design choice to modify the rotation angle range since the Applicant has not disclosed that having the specific material solves any stated problem or is for any particular purpose and it appears that the Vollrath's headrest would perform equally well with an well known rotation angle range used in the art.

4. Claims 11, 13, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vollrath in view of Yoshida as applied to claims 16 and 21 above and over Vollrath in view of Sutton et al. as applied to claims 10, 15, and 23-25, and further in view of U.S. Patent No. 5,842,738 to Knoll et al.

Vollrath, as modified, discloses a seat assembly that is basically the same as that recited in claims 11, 13, 17, and 19 except that the lever and second housing lack first and second cable seats, as recited in the claims. See Figures 1 and 2 of Vollrath for the teaching that the rods 8,8 of the headrest rotation transmission element include a rod seats. Knoll et al. shows a headrest similar to that of Vollrath wherein the headrest has an adjustment lever 22 (see Fig. 2) and a housing 28 each including cable seats. Knoll et al. teaches that the use of rods and cable are interchangeable transmission elements to control the lock member of a headrest (see column 5, lines 11-15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the seat assembly of Vollrath such that the lever includes a first cable seat and the second housing includes a second cable seat wherein the first and second cable seats are capable of operating to receive first and second cable, such as the headrest disclosed by Knoll et al. One would have been motivated to make such

a modification in view of the suggestion in Knoll et al. that rods and cables are well known transmission elements used in headrest lock members.

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vollrath in view of Yoshida as applied to claims 16, and 21 above, and further in view of U.S. Patent No. 4,600,240 to Suman et al.

Vollrath, as modified, discloses a seat assembly that is basically the same as that recited in claim 22 except that the second housing lacks a biasing coil spring, as recited in the claim. Suman et al. shows a headrest similar to that of Vollrath wherein the headrest has a lock member coil spring 30 (see Fig. 1) engaging a cross-member 18, and a coil spring 50 biasing the housing into a fully upright position (see column 2, lines 63-68 and column 3, lines 1-3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the seat assembly of Vollrath such that the assembly includes a coil spring capable of operating to bias the second housing into the fully upright position, such as the headrest disclosed by Suman et al. One would have been motivated to make such a modification in view of the suggestion in Suman et al. that the coil spring urges the headrest to the upright position.

#### ***Allowable Subject Matter***

6. Claims 12, 14, 18, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant's arguments with

respect to independent claim 23 have been considered but are moot in view of the new ground(s) of rejection.

### ***Response to Arguments***

7. Applicant's arguments filed 14 September 2006 have been fully considered but they are not persuasive. With respect to independent claim 16, Applicant argues that Vollrath fails to teach a lever rotatable attached to the cross-member. Applicant refers to the member 13 of Vollrath as an actuation handle. As set forth in the Office Action mailed 16 June 2006, Examiner reasonably interprets a "lever" as being a projecting piece by which a mechanism is operated or adjusted, as defined by *Merriam-Webster's Collegiate Dictionary, Tenth Edition*. As a handle is clearly a projecting piece, it appears that Applicant agrees that the member 13 of Vollrath meets the limitation of a lever. While Examiner agrees that Vollrath teaches that lever 13 is associated with the rod 10, the lever 13 attaches to the cross-member via the intermediate frame member 12, as well as the rod 10 connected to the spring 5. Examiner reasonably interprets "attach" as to bring into an association, as defined by *Merriam-Webster's Collegiate Dictionary, Tenth Edition*. As the lever is capable of rotation via this attachment, Vollrath teaches the lever limitation recited in claim 16.

Upon consideration of the Applicant's arguments, Examiner maintains the rejections of claims 16, 17, 19, and 21.

Applicant's arguments with respect to claims 10, 11, 13, 15, and 23-25 have been considered but are moot in view of the new ground(s) of rejection.



***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph F. Edell whose telephone number is (571) 272-6858. The examiner can normally be reached on Mon.-Fri. 8:30am-5:00pm.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JE  
November 27, 2006

  
**Peter M. Cuomo**  
**Supervisory Patent Examiner**  
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